

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A fluid cooled brake housing for a brake system that includes friction pads and a rotatable element to be braked, the brake housing comprising:

a casing having a circumferential wall and two axial end walls that define a cavity for housing the friction pads and rotatable element; one or more friction pads of the brake system, a fluid inlet in fluid communication with a fluid flow path that is internal to the circumferential wall, and a fluid outlet in fluid communication with said fluid flow path;

an opening in the casing at least one of the axial end walls through which a portion of the rotatable element can extend;

a fluid flow path formed around the periphery of the circumferential wall such that the fluid flow path is external to the defined cavity;

a fluid inlet in fluid communication with the fluid flow path;

a fluid outlet in fluid communication with the fluid flow path;

a supply of cooling fluid in fluid communication with the fluid inlet and the fluid outlet, the cooling fluid flowing from the fluid inlet through the fluid flow path to the fluid outlet thereby cooling the entire brake housing; and

a seal means for sealing the opening such that the casing cavity can be at least partially filled with a volume of lubricating fluid to provide a wet brake housing[; and]].

whereby, when a supply of cooling fluid is coupled with said fluid inlet, cooling fluid flows through the circumferential wall via the fluid inlet, the fluid flow

path and the fluid outlet, thereby cooling said housing.

Claim 2 (original): The housing according to claim 1, wherein said fluid flow path includes at least one channel between said fluid inlet and said fluid outlet.

Claim 3 (original): The housing according to claim 1, wherein said fluid flow path includes a plurality of parallel connected channels extending between said fluid inlet and said fluid outlet.

Claim 4 (withdrawn): The housing according to claim 1 further including sealing means for sealing said sealed cavity when said housing is mounted on an axle to provide a wet brake housing.

Claim 5 (withdrawn): A wall for a wet brake housing, said wall including an internal fluid flow path, a fluid inlet in fluid communication with said fluid flow path, and a fluid outlet in fluid communication with said fluid flow path;

whereby, when a fluid supply is coupled with said fluid inlet, fluid flows through said wall via said inlet, through said fluid flow path and out said fluid outlet to cool said wall.

Claim 6 (withdrawn): The wall according to claim 5, wherein said fluid flow path includes at least one channel between said fluid inlet and said fluid outlet.

Claim 7 (withdrawn): The wall according to claim 5, wherein said fluid flow path includes a plurality of parallel connected channels extending between said fluid inlet and said fluid outlet.

Claim 8 (cancelled)

Claim 9 (currently amended): The brake system housing according to claim 8 Claim 1 further comprising including a pump for pumping said circulating the cooling fluid through said supply and said the fluid flow path.

Claim 10 (currently amended): The brake system housing according to claim 9 further comprising including a heat exchanger in fluid communication with said the supply for cooling said the cooling fluid.

Claim 11 (currently amended): The brake system housing according to claim 8 Claim 1 further including comprising a volume of lubricating fluid sealed within said the cavity and at least partially covering said braking surfacee the rotatable element, said the lubricating fluid separate from said the cooling fluid.

Claims 12-14 (cancelled)

Claim 15 (new): An improved housing for cooling a friction-type braking system, wherein the friction-type braking system utilizes friction pads to slow the rotation of a rotatable element, the housing comprising:

 a cavity for containing the friction pads and rotatable element, the cavity comprising:

 a circumferential wall;

 a first end wall, the first end wall having an attachment means to affix the housing to a chassis member; and

 a second end wall, the second end wall having an opening through which a portion of the rotatable element can extend;

 a fluid flow path formed within the circumferential wall such that the fluid flow path is external to the cavity;

 a fluid inlet in fluid communication with the fluid flow path;

 a fluid outlet in fluid communication with the fluid flow path; and

 a supply of cooling fluid in fluid communication with the fluid inlet and the fluid outlet, the cooling fluid flowing from the fluid inlet through the fluid flow path to the fluid outlet thereby cooling the entire housing.

Claim 16 (new): The housing of Claim 15 wherein the cavity is sufficiently large to completely contain at least one disc brake caliper.

Claim 17 (new): The housing of Claim 15, wherein the fluid flow path includes a plurality of parallel channels extending between the fluid inlet and the fluid outlet.

Claim 18 (new): The housing of Claim 15 further comprising a heat exchanger for cooling the cooling fluid.

Claim 19 (new): The housing of Claim 15 further comprising:

 a heat exchanger for cooling the cooling fluid; and

 a pump for circulating the cooling fluid through the fluid flow path.

Claim 20 (new): The housing of Claim 15 further comprising:

 a seal means for sealing the cavity; and

 a volume of lubricating fluid sealed within the cavity and at least partially covering the rotatable element, wherein the lubricating fluid is physically separate from the cooling fluid.